NON-WIRES SOLUTIONS ROUNDTABLE October 1-2, 2003 BPA Headquarters, Portland, Oregon

BPA Headquarters, Portland, Oregon Meeting Notes

The Roundtable papers and other handouts referred to in these notes are posted on the BPA web site at: $http://www2.transmission.bpa.gov/PlanProj/Non-Construction_Round_Table/$

Welcome

Carolyn Whitney welcomed members and introduced facilitator Diane Adams.

Planning Process

Brian Silverstein kicked off the meeting with an explanation of BPA's new planning process for transmission projects. The process begins with identification of a problem and proceeds to a set of screening criteria designed to determine if the project is a good candidate for a non-wires solutions (NWS), he said. If so, BPA would conduct a detailed study to determine if and what type of alternative solutions would be appropriate. If not, BPA would focus on the transmission fix. The end product in the planning process is selection of a preferred solution, Silverstein said.

Screening would be biased in favor of exploring the NWS, he pointed out. Development of a new transmission facility takes at least four or five years, and there is currently sufficient time to explore NWS for some areas where future transmission problems have already been identified, including Washington's Olympic Peninsula, Southern Idaho, and Lower Valley in Wyoming, Silverstein said.

He explained that the new process requires developing the screening criteria, since "there is nothing we can take from a book" for this, as well as conducting pilot programs, which test various measures and alternatives. Using NWS to address transmission peaks is relatively new, and we want to focus our pilots on identified problem areas and use tools we would anticipate using, Silverstein concluded.

Policy Issue #1: Refine the Screening Criteria

Tom Foley, roundtable lead on issue #1, said his subgroup reviewed a draft screening tool and recommended revisions. The tool/form is divided into six categories of information: project applicability; project timeline; project cost; avoidable cost levels; recommendations; and screening notes. The screening subgroup "resisted the temptation" to change the first category on the form, realizing the "screening notes" area would be an appropriate place for discussion that arose about project applicability, he said. For project timeline, the subgroup's concern was with the fixed timeframes in the draft that would dictate whether to move forward.

If you get to question 4 in category 1 – can the problem be solved by load reduction or generation? – and the answer is "no," does the screening end? a roundtable member

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asked. In some cases, it probably does, Foley responded. This prompted considerable discussion of whether there are other questions on the screening survey that should be answered before a determination is made about whether to stop the screening. Aren't we trying to change the thinking of the engineer so we don't rule out NWS early on? a member asked.

This is "a fatal flaw" analysis, another member said. What type of flaw would stop a project from being an NWS candidate? he asked. One example could be a utility having to drop an unacceptable amount of load, Silverstein responded.

At what point to stop the screening remained a question. Why not drop question 4? Or move it to the end of the form? members suggested. Foley recommended dropping the "if no, stop" that follows question 4.

On another issue, a roundtable member suggested the screening questions should get at the likelihood of a transmission problem occurring, i.e., how likely is it that this situation will happen? Foley pointed out that the question relates to forecasting and suggested it be emphasized in question 3, which addresses timing.

With regard to project cost, do we want to limit moving forward with screening based on a particular level of costs? Foley asked. That question could be explored over time, and we could let the limit evolve, Silverstein responded. Foley and others agreed.

Foley moved on to the avoided cost category and a matrix with a breakdown of avoidable costs if a project is deferred. There are two underlying questions here, a roundtable member said: Is the NWS achievable/feasible and can you achieve the avoided cost targets? Foley suggested taking out the "if no, stop" after question 10, adding, it's premature at this point to decide to stop the screening.

The final recommendation at the end of screening should clearly be made from the perspective of the transmission planner doing the form, Foley said. We would want the screening form filled out completely, even if the recommendation is not to proceed with a NWS, he stated.

Foley then explained the second part of the screening tool, which is made up primarily of inputs to the model for the detailed analysis that concludes the screening process. He said the subgroup thought "everything that needs to be here is here," but one difficulty would be getting data from distribution utilities about their loads and forecasts. There was discussion about the types of data that are needed and how detailed the data would need to be to conduct a successful analysis. Some of what we need is generic, but a good chunk is location specific, Silverstein pointed out.

Does this tool allow for private investment in conservation? a member asked. That's information we could factor into the analysis, Foley indicated.

The existing subgroup will continue work on the screening tool, Adams clarified. And a roundtable member summed things up as follows: you'll devise generic values for the analysis that err on the side of placing a high value on deferring transmission and continuing the screening. You're trying to determine how much it is worth for the Transmission Business Line (TBL) to invest in NWS measures, but that is not the entire value, so let's be clear about that, he stated.

Institutional Barrier #2: Lost Revenues for BPA and Distribution Utilities

Paul Kjellander, roundtable lead on barrier #2, said lost revenue – the lost contribution to a utility's fixed costs due to losses in retail sales resulting from demand-side management (DSM) – could be viewed as a cost of doing business or as "a showstopper" for implementing DSM. He said the subgroup discussed how big the issue of lost revenue is and whether it has stopped utilities from making investments in DSM. We then moved on to solutions and identified four mechanisms, Kjellander said: institute an annual rate adjustment or true-up; impose higher consumer fixed charges to reduce lost revenues associated with DSM; recover lost revenues from each program annually or in the next rate case; and consider lost revenues as a cost of doing business. The subgroup spelled out two tasks to explore the question further: encourage utilities and regulators to examine the extent to which lost revenues impair the success of cost-effective DSM and look at ways to minimize lost revenue impacts.

A roundtable member explained an approach that is taken in Europe to address lost revenues. The "feed-in tariff law" treats lost revenues similar to a system benefit charge, she said. One member inquired whether the lost-revenue problem is more pervasive in some areas than others. It's everywhere, a subgroup member responded. Whenever you take an action that reduces retail sales, the problem exists, and there isn't an electricity system in the Northwest that has a solution, he stated. Lost revenues are a problem and a disincentive for DSM; some utilities say they won't do DSM without a solution, Kjellander agreed. It is a problem, and the question is, how creative can we be in dealing with it, he added.

If you have a cost-effective DSM project, could you identify the lost revenues and have BPA pay them? a member asked. Lost revenues grow year to year, so you have a steadily increasing tab, a member responded. The amounts are significant, and it's hard to imagine a circumstance in which it would be worth BPA's while to pay, he said.

Do we need a common solution or could we have a menu? a roundtable member asked. I don't think a single solution works; having a menu makes sense, Kjellander said. A member asked if the subgroup had considered performance-based ratemaking (PBR). PBR hasn't been widely embraced around the country; it may be as utilities move more toward retail competition, but it is not a short-term solution, Kjellander responded.

Have you addressed the issue of competitiveness among utilities? a member asked. This discussion is focused on how to keep the utility whole, but there are issues associated with competitiveness and load-growth in the region, a member pointed out. You have to

get buy-in from distribution utilities to do DSM, and if rates go up as a result, there is hesitation, she said. That's why the rate true-up is a good solution, a subgroup member responded. The true-up can go either up or down, he added. Distribution utilities will scrutinize NWS options with an eye to rate impacts, he agreed.

One member suggested the problem is a bigger issue for IOUs and large publics than for small publics. Rate regulated IOUs would worry about this and utilities that are losing load. This barrier shouldn't continue to create a bias against energy efficiency and DSM, another member said. We've done a lot of energy efficiency in this region without having a solution to lost revenues, she stated. Are pilot projects a way to look at this? a member asked. If we see the issue arise in a pilot, we would see if it's a major obstacle, she suggested.

I assume if BPA invests in a major conservation effort, it can recover lost revenue in future rates, a roundtable member observed. But there is huge resistance to rate increases, another pointed out. Is there a lot of cheap DSM on the table and is there a significant lost revenue problem associated with it? a member asked. The best time to tackle the issue is when there is a situation on the table to resolve, he stated.

We'll evaluate this issue in the pilots, a roundtable member summarized.

Policy Issue #3: Defining the Cost Tests

Dick Wanderscheid, roundtable lead on issue #3, said his group found that "the devil is in the details" with the cost tests. The Regional Cost Test (RCT) is the best approach to examining alternatives to transmission construction, and that's our recommendation, he said. BPA's Power Business Line uses the RCT, so it's reasonable for TBL to use it too, Wanderscheid stated. Among the major issues, we saw that as you increase the complexity of a cost test, getting the inputs becomes more difficult, and the margin of error and opportunity for being "off the mark" becomes greater, he said. TBL has not used the RCT in the past, but getting a wide-scoping test on the table early in the process is a good idea, Wanderscheid concluded.

The cost test is only one factor in the decision, Silverstein responded. We need to focus on the two tests in the paper, he said: the RCT and the Utility Cost Test (UCT), he said. It would be inappropriate to single out only one test, according to Silverstein. The paper also states that for purposes of considering the TBL as a stand-alone entity, the UCT provides insights, Wanderscheid pointed out.

The roundtable members discussed the appropriate sequence for conducting the two tests. Maybe we're hanging up on the word "primary," which the paper uses in recommending the RCT, a roundtable member suggested. It may not be important which to consider first, but to think about both, he said.

I would not want to see BPA hold back on contributing to a project that is valuable to the region as a whole, a member pointed out. Some measure could help BPA a little, but

give most of the benefit to others, he said, indicating that a cost test that focuses on benefits for TBL should not be used to preclude such an investment. With the RCT, would the benefit to transmission fall out of the analysis? a member asked. Silverstein said it would. As long as the cost components are reported separately, you could pull out the parts you need, the member suggested.

Another member questioned whether "we've done anything" if we leave all the cost tests in the mix. "I'm not a fan of hiding information," Silverstein responded. The Rate Impact Measure (RIM) Test information wouldn't be used for decision-making, but it provides useful information, he said. Every NWS that reduces throughput and revenues "will flunk the RIM test," a member pointed out. I don't look at it as a test, but another piece of information that is helpful, a roundtable member commented.

Silverstein suggested a change in language for the paper's recommendation, which would delete "primary" and add a phrase to the end of the sentence: "The NWS roundtable subcommittee on defining cost tests recommends that the cost test to be used in examining alternatives to transmission construction should be the Regional Cost Test, a PNW variant on the Total Resource Cost Test used in many national jurisdictions to identify regional least-cost solutions." I'm fine with that, Wanderscheid said.

Given the time spent documenting the costs of NWS, an equal amount of time should be spent documenting benefits, a roundtable member suggested. There are benefits to a local area that wouldn't be captured in the tests, she said. There was discussion of how participant costs/benefits would be factored into the analysis. If you can't get the participants to play, you default to building the wires, a member pointed out.

Would the tests include effects on other utilities' transmission facilities? a member asked. The tests have to address all of those who are affected, not just BPA, Silverstein replied.

Adams asked if the group approved Silverstein's proposed language change, and there were no objections. The roundtable concurred the subgroup had completed its assignment.

Policy Issue #4: Review of the Detailed Studies

Art Compton, roundtable lead for issue #4, said while the first of the detailed studies will be new to the group when they are presented, in the future, members will get executive summaries ahead of the meetings. We will send out draft findings and recommendations and direct people to where studies are on the web, so they can digest them before the meeting, he said. We will remain vigilant about ways to get the information to you, Compton added.

With BPA staff leading the way, the roundtable members plunged into the first detailed NWS studies. Staffer Terry Oliver explained that BPA was working with its consultant, E3, to adopt and adapt the computer model needed to do the analyses. Eventually we will be running the models on our own, he said. The staff plan was to assess three proposed

transmission construction projects: Olympic Peninsula, McNary-Brownlee, and Lower Valley. According to Oliver, staff determined that the McNary-Brownlee project was not ripe for analysis. The project was load-service driven, and in reviewing the area loads, we found they didn't develop as indicated in previous forecasts, he explained. An updated forecast showed the need for the transmission project was far enough into the future that an in-depth analysis now might be a waste of time, Oliver said.

He went over several "curiosities" that came out of the analyses, including concern that more accurate load forecasts are needed for the studies. Load forecast uncertainties should be explicitly examined when analyzing NWS, he reported. Silverstein pointed out that for a construction project, once tasks such as engineering and environmental analysis are completed, they can be set aside until the project is needed. But with the NWS, if loads grow faster than expected, there may not be time to get the DSM programs in place fast enough to meet the need, he explained.

Oliver said another lesson that came out of the analyses is that project and measures costs may vary significantly from planning estimates. We need to get more lock-down on the cost numbers, he said. There is a point at which the costs and benefits flip, so we need more accuracy, Oliver stated.

The analyses also pointed up uncertainties specific to the projects, he went on. For the Olympic Peninsula, there is major uncertainty about the viability of certain local industries, and the uncertainties present potential stranded investment risk for construction, Oliver said. If the industries go away, the need for the transmission project goes away, and the uncertainty could be mitigated by NWS, he added.

With Lower Valley, there is a high likelihood of a gas pipeline being built, and it could obviate the need for the transmission project, Oliver explained. The pipeline would bring a multifuel future to the valley, he said. If you go with the wires, it's all or nothing – having the smaller-scale alternatives is important, a roundtable member commented.

<u>Olympic Peninsula</u>. Oliver went through the Olympic Peninsula findings, using a table that showed results for a range of alternatives: distributed generation – combustion; other distributed generation; demand response; direct load control; energy efficiency; and renewables. Columns on the table represented findings for cost-effectiveness, annual megawatts available, and what is available in three years.

There were numerous questions about the Navy's existing diesel generating units as a source of distributed generation. The units offer about 20 megawatts (MW) of generation, according to Oliver's table. Even if the units aren't part of the NWS solution, they would run if the grid goes down; but from an environmental viewpoint, they aren't attractive, he said. The total NWS available over three years would be 80 MW, 60 from energy efficiency and 20 from the diesel generation, Oliver pointed out. He reported the bottom line for the Olympic Peninsula as follows: demand response is sufficiently close to 1 to continue a pilot program; no single measures will solve the problem, but it's an

opportunity to test a portfolio approach; and data on energy efficiency resource and peak impacts needs to be improved.

Puget Power has about 40 percent of the customers on the peninsula, and the solution has to be predictable, achievable, and timely, a roundtable member pointed out. Is there a plan to get data about the uses within the peak we are trying to shave? a member asked. The more we know about what constitutes the peak load, the better we can respond, he added. It might be worth considering high-efficiency woodstoves, a roundtable member said, and another suggested evaluating wind and biomass potential on the peninsula. Other members supported taking a closer look at the viability of offering high-efficiency woodstoves. "People will spend their own dime to burn wood," a member stated.

I'd like to see more detail on the diesel generators and the options for limiting their operation to less than 500 hours a year and for converting to a cleaner fuel, a roundtable member stated.

There was discussion about the components of the forecast load growth for the peninsula and whether the growth could be offset by conservation. It would be worth finding out whether the growth is made up of new residences or something else, a member suggested. It would take "a Hood River level of effort" to get 20 MWs a year of conservation, Oliver pointed out. But it could be accomplished – I'm not daunted by 20 MWs, a roundtable member responded.

<u>Lower Valley</u>. Staffer Ottie Nabors went through the analysis for Lower Valley, a winter-peaking system in which growth has consistently exceeded the forecast. In Lower Valley, we're looking at deferring part of a five-phase construction project, which is planned over 12 years at a cost of \$55.6 million, he explained. The first part of the project, replacing poles, has to be done, so those costs were stripped out of the analysis, Nabors said. We looked at three options, he said: three-year deferral; 10-year deferral; and build the first two phases then defer further construction for a long period.

In Lower Valley, the load is growing 6 to 7 MW a year and will exceed transmission capacity by 2007, Nabors said. If we defer construction for three years, the avoided cost is \$51.81 per kW, and if we defer for 10 years, the avoided cost is \$219.95 per kW, Nabors reported. The longer we postpone, the more attractive the NWS, he said. The big question mark is the natural gas pipeline, which would bring the equivalent of 200 MW of new energy, Nabors indicated.

The Lower Valley findings show 11.5 MW of NWS available annually and 47 MW available in 10 years. All of the measures, from distributed generation to renewables, are cost-effective for at least some number of hours annually under the 10-year deferral scenario. If the gas pipeline comes in, an important factor will be what it is used for, Nabors said. It will be important to have a local integrated resource plan, he said.

Doesn't BPA have "a big stick" here? a roundtable member asked. The transmission line would require a lot of resources for one customer, she said. Yes, but Lower Valley is an area with a very high average income and a lot of political clout, another member replied.

Staff presented a table, assessing its progress up the "learning curve" for NWS analysis. Staff rated itself highest on conceptual understanding and lowest in use of the screening model. Oliver pointed out that the state of the data that is needed to make the analyses is deficient in many cases. We don't have data on the value of the NWS measures for reducing transmission peaks, he added.

But you're at "the cutting-edge" of the industry, a roundtable member responded to the staff's assessment. This is very important work, he added.

Oliver said the staff would continue to consider the potential for pilot projects on the Olympic Peninsula and the potential for energy efficiency measures to shave peak. With Lower Valley, there is the possibility for pilots and there is peak-shaving potential, he said. We need to reassess the gas issue and work toward an integrated resource plan to get at the energy future for the valley, Oliver continued. With regard to the NWS analyses in general, we need to continue to redesign the model; improve the energy efficiency analytical methods; and build new supply curve estimates, he said. By January, we should have final Olympic Peninsula and Lower Valley analyses completed and possibly one more, Oliver concluded.

Institutional Barrier #3: Incentive for Distribution Utilities to do Accurate Forecasting

Kris Mikkelsen, roundtable lead for barrier #3, said she was surprised at the complexity of the issue her subgroup tackled. Ken Corum explained that interest in the topic has arisen because there is a perception that the incentives are not there for utilities to accurately forecast their transmission needs, and therefore, they tend to overforecast, causing transmission to be built before it is needed. Utilities pay for what they use, not what they forecast, he said.

BPA produces the forecast for about 120 small customers, but that's only about 25 percent of the transmission load, Corum explained. Other customers forecast their own load, but we didn't get a good sense of the methods that are used, he said. We can get the forecasts those utilities submit to BPA, but it's not clear we can get actuals, Corum said.

If the forecasts are relatively good, then we don't have a problem; but if they aren't, then we need to look at methodological issues, he said. We need to consider the following questions, Corum said: How are we doing? If there are problems, how do we address them? Can we plug into Western interconnection work to get at the best approach? and How can we make the incentives work better?

Aren't point-to-point customers penalized for overforecasting? a roundtable member asked. There is no relationship between the forecast and the commercial transaction of purchasing transmission, Silverstein responded. There's a huge disconnect, he added.

What we're describing are contract positions, not actual physics, a member pointed out. We have contract paths that may or may not relate to the actual flow of electrons, he said.

What is the incentive for a utility to overforecast? We have no incentive to do that, a member pointed out. I'm sure people do a professional job, Corum responded. But the only penalty that occurs is when/if BPA builds too much transmission, and that cost is shared by everyone, he said.

Can't BPA compare the forecasts for network customers with their actuals? a member asked. Yes, but the real problem is with the forecasts we don't do, Silverstein replied. In the early 1990s, we had organizations in the region that did a forecast and ran it against the actuals; but with deregulation, utilities view this information as business sensitive and we don't have the data to make comparisons, he said. Why wouldn't a simple solution work: make customers buy what they forecast, a member proposed.

This is one of the problems that would be solved by a functioning RTO, a roundtable member commented. Without an independent transmission entity, you don't have a system that is as efficient as it could be, he said.

If you are going to build a transmission line, you'll do a forecast, another member told BPA. This is something you deal with site specifically, he said. But it's problematic in some large areas, Silverstein said. In the Puget Sound, for example, BPA forecasts transmission for less than 10 percent of the load, he pointed out.

If you lose a load like an aluminum smelter, it changes everything, a roundtable member added. You have to start with how the system is being used – we have a difference between contracts and flows, and there are real problems with that in the Western system, he continued. Planning will only be as good as utilities' willingness to share data, he said.

The Northwest Transmission Assessment Committee (NTAC), a new entity within the Northwest Power Pool, is still considering its mission and it may review forecasting, Silverstein said. It's a potential forum for resolving this, he added.

Could NTAC take on Task 1, determining if there is a problem with load forecasting? Corum asked. They are uniquely positioned to do it – they have the actuals, Silverstein responded. A roundtable member said his utility could offer a forecast done by an independent consultant, which BPA could use to see how it squares with BPA's own forecast for the utility and with actuals.

I don't want to leave people with the perception that we are building transmission too soon, a roundtable member stated. Sometimes it's too late, he said.

It looks like you are turning to the Power Pool committee for Task 1, Adams clarified. Tasks 2, 3, and 4 will need to wait on Task 1, Corum added. The subgroup members said they plan to meet again to continue to work on the forecasting issue.

It seems fair to say that it is a good idea to get a better assessment of where the needs are on the system; the conclusion is that we don't have enough information, a roundtable member said. Regarding forecasts, you don't just want only to predict, but to manage, he continued. Part of this process is redefining forecasting to include managing and influencing the needs, he concluded.

Institutional Barrier #5: Lack of Coordination and Transparency in Transmission Planning Process

Hardev Juj, roundtable lead for barrier #5, said his group looked at the issue of a lack of transparency in planning. People say, 'BPA does the planning, and we don't see it,' he said, in describing the issue. Planners are in a reactive mode and there isn't integration among projects and utilities – people do their projects in a vacuum, Juj said. In subgroup discussions, it was clear that cost allocation is a very important issue – who is getting the benefit and who is paying, he said. Juj pointed out that the new NTAC process is a step toward a more open process; it is open to anyone who wants to participate.

He went on to list strategies for getting at the goal for better communication to make planning more transparent and more amenable to alternative solutions, including: a coordinated regional transmission plan; a broader group of stakeholders for transmission planning; better understanding and dissemination of the economic consequences of resource siting choices and load growth; and information far enough in advance so entities can respond with a full menu of choices.

Things are falling into place with the subgroup's first task of engaging stakeholders in a regional dialogue on a more coordinated and transparent planning process, he indicated. We looked around for a platform and felt the Power Pool's Technical Planning Committee (TPC) could offer the opportunity, Juj said. The newly formed NTAC is a subcommittee of the TPC.

A second task calls for developing a BPA long-range transmission plan that identifies NWS. Will BPA do a plan separate from NTAC? a roundtable member asked. Silverstein said BPA would initially work on a parallel track with NTAC to do a long-range plan for its system. But NTAC is moving and we may not end up doing our own plan, he said.

<u>NTAC</u>. Chris Reese of the Power Pool made a presentation on NTAC and where it is headed. It came about because people thought we needed an organization in the region to do transmission planning, and we formed under the TPC because it was already chartered and funded, he explained. Reese described how NTAC would operate, pointing out that participants will identify transmission needs; bring them to the committee along with

data, including load forecasts and specific requirements; and the committee will run the models. He said all solutions are welcome and will be evaluated, including non-construction alternatives.

To date, we have a scoping document that explains what NTAC is and a "wish list" of work to take on, Reese said, adding that NTAC has organized teams to work on establishing the "base case system," including committed resources, committed transmission, known constraints, and problem areas. Our first task is assessment and benchmarking the existing system, and if all goes well, that could be done by March, he said. The initial work will include improving the Pathway Update Report, Reese added.

We now have this planning body that wasn't anticipated when the roundtable was formed, one member pointed out. That raises the question of whether we are advising the right body. Should we be advising NTAC? he asked. I don't think so, Silverstein responded. It is still BPA that has to make the investment decisions. And remember, he added, NTAC is only about a month old.

There were questions about how comprehensive NTAC planning would be and the availability of data. Reese said the point of NTAC is to provide information on the needs for transmission expansion. This effort is a way "of morphing" from utility-level planning to regionwide planning, he indicated. Reese reported that there has been no resistance to NTAC.

There are competing points of view in the RTO West discussions, but there does not seem to be disagreement about whether regionwide planning is needed, only about who should do it, one roundtable member commented. Another member said he did not see NTAC "as the answer to everything." We've talked more about coordination than transparency, and as long as there are competitive sensitivities, the process won't be very transparent, he stated. What will be the results of this NTAC planning exercise? he asked. NTAC could be just "a grand exercise in meetings" if the planning information developed doesn't go anywhere, Reese acknowledged.

The debate over planning authority and responsibility came up in RTO discussions, Silverstein said. The question of who has the authority to implement hasn't been decided, and BPA still has to make decisions, he stated. The Power Pool work has no authority "to direct anyone to do anything," Silverstein said. BPA and other utilities still have to make investments and implement solutions, he pointed out. We need to assure that what we're doing is used in the decisions, a roundtable member said.

A public information component isn't included in the transparency/coordination paper, a roundtable member said. She said there are measures, such as time of use rates, about which the public should be informed.

I have a deep concern about whether there is a shared view that we need an independent transmission organization, a roundtable member stated. I don't know if NTAC is a step toward an independent organization or a convenient substitute to put that off, he said,

adding that NTAC "won't pass muster as an independent organization." Just because the meetings are open doesn't mean the process is open; the public accountability and oversight may be inadequate, he continued. I am nervous about this and don't see how it advances the cause of an RTO, he said.

That's a good challenge, Reese responded. We do want an open process, and we want regulators and others there, he said. You've issued a good challenge, he reiterated. Silverstein expressed BPA's commitment to making an RTO happen. This is not the stopping point for that process, he assured the roundtable.

Reese said he is planning to add roundtable members to the NTAC e-mail list, unless there were objections. None were raised.

Institutional Barrier #10: Reliability of NWS versus Transmission Upgrades

Tom Foley, roundtable lead for barrier #10, said the subgroup got right to the issue of determining the certainty with which BPA can rely on NWS to reduce peak transmission load in a 1 in 20 year winter. The first step in getting at reliability, the subgroup determined, is to separate the NWS into groups with certain known characteristics, i.e., energy efficiency measures, distributed generation, contractual demand response, and voluntary demand response.

Foley then outlined possible steps toward determining the reliability for each grouping. For energy efficiency, we could reconvene the Regional Technical Forum (RTF) to analyze deemed measures; we could run pilot programs; and we could run a real deferral project for two years, he said. We don't know how much these measures would cost, and we would need to identify sources of funds for them, Foley acknowledged. He said the subgroup recommended gathering a group of QF representatives to discuss several issues with regard to distributed generation. For contractual demand response, reviewing the past history of contract end-users would yield valuable information, Foley said, and for voluntary demand response, a similar approach could be used. In summary, we need to be sure NWS will respond in as reliable a way as a transmission line would in the 1 in 20 year weather event, he said.

Since the RTF participation is crucial, Mike Weedall of BPA said a small group should get together and think about what would be needed and how much resource to dedicate to RTF participation. We need to refine the RTF database, Foley agreed. There are a lot of measures in the deemed category, and we need to determine if they are deemed for capacity, as well as energy, he said.

The reliability of NWS seems like "the crux of the matter," a roundtable member said. This has to be locked down, she said. When push comes to shove, without the data locked down, "we will never get over the hurdle of making a choice to do something different," she added.

Foley said the subgroup should have a plan for going forward ready by the end of October

Institutional Barrier #7: Better Price Signals

Tom Karier, roundtable lead on barrier #7, said the subgroup had what amounted to a two-phase discussion of transmission price signals. In the long term, the group may recommend an effort to come up with a more fully developed dynamic pricing system for transmission, he said. In the short-term, it may be feasible to put into place a better system of price signals, including the retooling of some "crude price signals", i.e., the penalty for unauthorized increase, that are already in place, Karier said. He said pilot tests might be appropriate for determining whether some of these signals would be effective.

Another issue in our discussions was the reliability of the response to price signals and whether they work to curb demand or simply impose harm on customers, a subgroup member said. Price signals haven't been commonly used for transmission, so we don't know the answer to these questions he said, adding, that's why we thought a pilot program approach would be a good idea. An alternative discussed for the short term was a tiered rate approach, based on a customer's historic load service, with peak use above the tiered allocation charged at a higher rate, another subgroup participant explained.

Since some of the short-term proposals could potentially be implemented in the next rate case, there were questions about when BPA would again address rates for transmission. A BPA staffer explained BPA's rate setting process, which she said is spelled out in statute. The current rates are in place until 2005, so in 2005, BPA will again address its transmission rates, she said. When we plan to introduce a new substantive idea for rates, we have pre-ratecase workshops, Silverstein said. If we want to explore new concepts, we can do it in a workshop, he said, adding that it is almost impossible "to plow new ground" in the 7(i) ratecase process.

That seems like a reasonable way to explore the ideas in the paper, Karier said. The goal is to reduce peak consumption, but we're not sure if the proposals will be effective without some tests, he said. Karier said the proposals should be framed as pilots and approached cautiously, since "there are reasons to expect they won't work." A properly structured program to buy back peak demand might work as well as a pricing penalty, he pointed out.

One roundtable member commented on the complexity of trying to send price signals through a mechanism like a tiered rate. It seems like customers could all end up having a different rate, and it could dramatically increase the amount of work BPA would have to go to, he said. And he pointed out that utilities have no way of passing the price signals along to their retail customers. I like the idea of having incentives, he said.

Karier suggested the subgroup work to combine its two papers and get more focused on whether to emphasize a measure such as the demand buyback or to explore other pricing incentives through pilot programs. The subgroup needs to have some follow-up discussion, he said.

This paper points out that BPA's transmission pricing needs to be overhauled, a roundtable member stated. You could let this paper go forward as a critique of BPA's transmission pricing, another member commented.

Policy Issue #2: Design 2004 Pilots

Margie Schaff, roundtable lead for issue #2, reported that after sorting through some initial confusion about its assignment, the subgroup began considering which measures to look at for the pilots. A big issue is getting good data for the pilots, she said. If we don't have good information, "it's garbage in and garbage out," Schaff said. She said to conduct a pilot to reduce peaks, for example, you have to have information about when the peaks occur. If we're going to look at wind as an NWS, it doesn't make sense to consider it if the wind isn't blowing when the peak occurs, she added.

BPA's current budget for pilots is \$4 million for FY 2004-06, with FY04 capped at \$1 million, she said. Weedall said plans need to get under way soon or time will run out for 2004. He listed several questions to be answered for the pilots – what do we want to learn? what are the specific technologies and do they fit the need? who pays? – and reported that BPA is working on a demand exchange test for the Olympic Peninsula.

Weedall presented a draft list of screening criteria that could be used for selecting NWS tests. Several roundtable members commented on the criteria, including comments that \$1 million annually was inadequate to achieve much in the way of a pilot.

All of these criteria are critical, a roundtable member said. I thought we would try to get pilots that do all of these things, he said. He suggested BPA ought to rally support for increasing its borrowing authority to fund NWS pilots. The budget seems to have been established without any thought about whether we could achieve an objective, he added. We need a test that is robust enough to show whether we can defer a transmission line – we want to show we actually *can* defer a line, another member stated.

Schaff went over a list of tasks, noting that subgroup members wanted a pilot for both a summer and winter peaking system. Tasks included choosing the measures to test; engaging stakeholders; determining a budget; finding co-funding partners; and implementing the pilot. She said pilots would provide data for the decision on whether a line could be deferred. We need to think about what we're testing – specific measures for specific reasons, Schaff stated.

We should launch pilots in areas where a line may be deferred and look at questions that can prove or disprove the measures under consideration, a roundtable member said. Let's put all of our money into the Olympic Peninsula, for example, and see if measures work where they are needed, he urged. We need to get "the most bang for the buck," he added.

BPA staffer David Le explained BPA's draft FY04 pilot funding chart, which divides the available dollars among the Olympic Peninsula, Southern Idaho, and Lower Valley. Is this budget enough to get anything accomplished? a roundtable member asked. These numbers will cover research and marketing activities, Le said. For any area where we are considering a pilot, we have to do research to figure out if it is even feasible, he said.

Silverstein pointed out that all of the funds represented on the chart are expense, not borrowing. In order to capitalize something, we have to demonstrate it is used/useful, he said, noting that if BPA doesn't need to defer a line at present, there's a question as to whether associated NWS could be capitalized.

What about lost opportunities? a roundtable member asked. Yes, at least capture the lost opportunities, another member agreed. A third roundtable member urged the group to get more creative. Demand exchange isn't that creative, but studying wind in Southern Idaho, "that's out of the box," he said.

I'd request that we pull the data together for the next meeting, a member recommended. Let's get the historical peak information for the Olympic Peninsula and Southern Idaho and meteorological data to see if there is a convergence, she suggested. Weedall said he would work on providing the needed data.

There was further discussion about the adequacy of the budget. The only way to see if some NWS measures work is to "see if we can make an offer that will get a response," a roundtable member said. And the only way to do that for the Olympic Peninsula is to have the money to partner with Puget Power – it seems we could do that now, he stated. "Offer a bounty for megawatts in a constrained area," he urged.

Can we recommend that the Lower Valley budget be redirected? a member asked. After some discussion, the group agreed that it is not worth studying Lower Valley until there is a decision on the natural gas pipeline proposed for the area. I don't object to dropping Lower Valley from the pilot funding list in 2004, Silverstein agreed.

Our concern is that we are accountable to our customers, a roundtable member said. If we are late with a project and something happens, we have to explain why we didn't take the necessary action, he said. Next year, we need to see if these measures will work for us; if they don't, we have a transmission project that must go forward, he indicated. We're prepared to work with BPA to accelerate the NWS, but there will come a point when we have to look at whether an alternative will work, he stated.

We have done "a paper exercise" and we don't need another one, a roundtable member agreed. We need to go out there and do something, he urged.

Is there data on what we're really saving with these measures? a roundtable member asked. We know about energy savings, but does this also work for capacity? Do we have the data to show whether the money invested gets the savings? he asked. Part of the budget is for looking at these basics, another roundtable member responded.

Schaff said her subgroup would continue to work on clarifying measures and costs for pilots, and interfacing with the barrier #10 subgroup, which is working on uncertainty about reliability and persistence of the NWS measures.

Institutional Barrier #15/9: Who Funds? Who Implements?

Bill Pascoe, roundtable leader for barrier #15/9, pointed out that "who benefits" is an important part of the discussion of who funds and who implements NWS. We saw two issues with regard to this question, he reported: energy efficiency and how it applies to distribution and transmission; and cost sharing in implementation of NWS. Pascoe outlined four tasks the subgroup identified, including: understand current NWS drivers and delivery mechanisms; create awareness about the multiple benefits and beneficiaries of NWS; create broader awareness of NWS in transmission planning processes; and create real-world examples of implementing NWS in partnership with utilities. You learn by doing, he said of the latter task.

The roundtable discussed some elements of how to approach funding and implementing an NWS solution on the Olympic Peninsula, identifying the various players and potential funding sources. One member suggested the BPA Environmental Foundation might have resources that could be tapped. A BPA staffer suggested the possibility of developing a computer model that would link the benefit stream with where costs come from in an NWS solution. Silverstein pointed out that some contacts have been made on the Olympic Peninsula, but things are in a preliminary stage.

Members suggested various sources of funds, including money from the Department of Energy, the National Energy Plan, and the new energy bill that is in Congress. The easiest way to go about this is for BPA to nudge existing local conservation programs along by improving the offerings, a roundtable member suggested.

Pascoe pointed out the need "to get out and tell our story." Suggestions were made to make presentations to state regulators, the Energy Trust, the Northwest Energy Coalition, and the Northwest Power and Conservation Council. BPA staff has been working on a newsletter that would be an educational tool, and there are plans to put out an annual report on the roundtable's work, Whitney said. She circulated a draft of the first edition of the newsletter and asked for members' comments.

Aren't we really talking about "least-cost" transmission planning versus "non-construction" alternatives? a roundtable member asked. We may come back to the wires solution, but we are considering other solutions, he said, adding that the roundtable ought to consider changing its name. Other members agreed, and there was a consensus that another name would be appropriate, although not everyone liked the suggestions offered. Members said they would aim to rename the roundtable before the first edition of the newsletter is printed.

FY2004 NWS Targets

Weedall went through a draft list of eight targets related to NWS that BPA aims to meet in 2004. We think these are aggressive goals, he said. A roundtable member suggested there might be a target related to looking at the rate issues associated with NWS and initiating rate workshops to discuss them. What about adding something about progress on an RTO? he asked. Other members suggested language tweaks, including changing the term "public involvement" to "public outreach."

Silverstein pointed out that BPA has a vice president and other staff working to negotiate an RTO. The step taken at the Power Pool is "a big leap" – independence is "a ways out there," another roundtable member responded. There was some give-and-take over whether "independence" is the goal, with some members contending that it must be the goal and others expressing another point of view.

BPA Administrator Recognizes Roundtable

Administrator Steve Wright joined the group to thank members for their contribution to the NWS issues, ask them to continue on for another year, and to express BPA's commitment to the process. I feel great about the progress you are making, he said, adding that BPA has plans to use the new screening tool the roundtable helped to develop. He presented each member with a recognition certificate and an appreciation gift, a piece of obsolete 500 KV conductor fashioned into a paperweight.

Ralph Cavanagh presented Wright with a commendation from the Northwest Energy Coalition, recognizing BPA for convening the NWS roundtable.

Policy Level EIS

BPA staffer Charles Alton laid out BPA's plan to develop a policy-level environmental impact statement (EIS) for TBL. We will be getting that process going later in October, beginning with a notice in the Federal Register, followed by scoping, he explained. We will want to have input from others, including this group, Alton said, adding that the draft EIS will present a range of alternatives and get people thinking differently, i.e., transmission doesn't necessarily mean wires. Our objective is to work along with you to do the EIS, Alton stated. We don't have to make a decision at the end of the EIS process, but we are going to get the issues out on the table, Silverstein added.

Next Meeting

Whitney circulated a tentative schedule for meeting dates in 2004 that proposes two-day roundtable meetings in January, April, July, and October. Some members said they would prefer one-day meetings more frequently, but others said they preferred the two-day format. The group reacted positively to the idea of day and a-half meetings, and subgroups members agreed that some issues could be addressed via conference call.

The meeting adjourned at 3 p.m.